

REMARKS

The above amendments to the above-captioned application along with the following remarks are being submitted as a full and complete response to the Official Action dated December 13, 2004 and the phone interview with the Examiner conducted on March 2, 2005. Applicants thank the Examiner for taking the time to conduct the telephone interview.

During the interview, the Examiner asserted that it is prima facie obvious for one skilled in the art to replace the client in Wollrath with a user of the invention and applying the program-specific approach for lease to anticipate the user-specific approach for usage estimation. Applicants strongly disagree with this position and will traverse that position hereinbelow.

In view of the above amendments and the following remarks, the Examiner is respectfully requested to give due reconsideration to this application, to indicate the allowability of the claims, and to pass this case to issue.

Status of the Claims

Claims 1-7 are under consideration in this application. Claims 1-3 and 5-6 are being amended, as set forth in the above marked-up presentation of the claim amendments, in order to more particularly define and distinctly claim applicants' invention.

The claims are being amended to correct formal errors and/or to better recite or describe the features of the present invention as claimed. All the amendments to the claims are supported by the specification. Applicants hereby submit that no new matter is being introduced into the application through the submission of this response.

Formality Rejection

Claim 1 was objected to for a minor formal error. As indicated, claim 1 has been amended as suggested by the Examiner. Accordingly, the withdrawal of the outstanding informality rejection is in order, and is therefore respectfully solicited.

Prior Art Rejection

Claim 1 was recited under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 6,263,350 to Wollrath et al. (hereinafter "Wollrath") and in view of U.S. Pat. No. 6,427,152 to

Mummert et al. (hereinafter “Mummert”), claims 2-6 were recited as being unpatentable over Wollrath in view of Mummert and further in view of U.S. Pat. No. 5,410,598 to Shear (hereinafter “Shear”), and claim 7 was rejected as being unpatentable over Wollrath in view of Mummert and Shear and further in view of U.S. Pat. No. 5,276,867 to Kenley et al. (hereinafter “Kenley”). These rejections have been carefully considered, but are most respectfully traversed, as more fully discussed below.

A service method of a rental storage of the present invention, as now recited in claim 1, in which rental storage *users* use the rental storage provided by a storage provider or a network and each of said rental storage users (*“as shown in FIG. 5, the file has fields including the user identifier, the billing method, the contracted capacity, the charge interval, the report limit, and the amount estimated of capacity for each user record”* p. 25, lines 1-4; *“The history data file 87 is a data file for recording at a regular basis the amount of data in the storage used by the rental storage service user 1. ... as shown in FIG. 6, the file has fields of user identifier, date, storage area, and the amount of data for each user record”* p. 26, last paragraph) and said storage provider communicate with respect to rental storage service, comprises: establishing a contract between said storage provider and each of the rental storage users thereby allowing using storage of said storage provider by each of the rental storage users; calculating by the storage provider an estimation of a data amount in the rental storage for future storage usage of each of said rental storage user, based on the history of storage usage of each of said rental storage user; showing by the storage provider conditions of said contract (Fig. 5; p. 27, first full paragraph) including a contracted billing method, a contracted billing period, a contracted storage data amount, a notification threshold storage data amount for triggering contracted notification to each of said rental storage users prior to reaching the storage data amount (p. 26 lines 13-14; p. 27, lines 9-10), an indication (“Yes” or “No” in Fig. 5) of whether **an estimation option is available in said contact for changing the conditions of said contract based upon the estimation** (p. 26, lines 9-11), and the estimation (Fig. 7) to each of said rental storage users; and re-configuring the conditions of said contract as changed by each of said rental storage users if the estimation option is available in said contact. The users are human users (i.e., persons, corporations) having capacity to make contracts and pay bills charged to said human users (*“ideal use of storages in correspondence with the billing charge to the users by proposing the most optimum contract*

options to the users (Abstract)”; “*terminal used by the storage user*” in Fig. 3).

The invention is also directed to another service method of a rental storage recited in claim 2, similar to that recited in claim 1, but further comprising: reporting charge to the rental storage service user by the rental storage service provider; paying the charge for the use of said storage by the rental storage service user to the rental storage service provider; and reporting the history of storage usage record.

The invention is also directed to another service method of a rental storage recited in claim 3, similar to that recited in claim 1, but further comprising: proposing to each of the rental storage service users a recommended contract on an amount of data according to the estimation.

Applicants respectfully submit that none of the cited prior art references discloses, teaches or suggests that “showing/reporting by the storage provider conditions of said contract including a contracted billing method, a contracted billing period, a contracted storage data amount, a notification threshold storage data amount for triggering contracted notification to each of said rental storage users prior to reaching the storage data amount, and an indication of whether an estimation option is available in said contract for changing the conditions of said contract based upon the estimation, and reporting the estimation to each of said rental storage users thereby re-configuring the conditions of said contract as changed by each of said rental storage users if the estimation option is available in said contract” according to the invention. As such, the *users*’ rental storage usage corresponding to contract conditions is optimized, and billing charges to the users are reduced (p. 60, lines 11-14).

In contrast, Wollrath only discloses a system that a server grants a lease period for clients, i.e., “*computational entities (e.g., applications, programs, applets, etc.) executing in the computers* (col. 2, lines 43-46)”. Wollrath’s server (computer hardware, not a person or corporation) merely grants and determines a lease period automatically for a program (“the client”; a software, not a person or corporation) that request to the server (col. 12, lines 39-43). The server or the program is not a human user (i.e., persons, corporations) having capacity to make contracts and pay bills charged to said human users. The server and the program merely facilitate charging bills and making contracts, but never get charged or make contracts for itself to be responsible for paying the bills and to fulfill contractual obligations.

Wollrath’s lease does not involve persons and corporations, but between the computer

programs and the server managing the storage space. While the “lease” is active, the computer program is guaranteed access to the group of storage locations and may perform read and write operations on them, and the server maintains the storage locations' integrity, e.g., preventing the leased file to be deleted, written over, or otherwise affected by any entity other than the client (col. 12, lines 53-59). In short, Wollrath merely discloses interaction between the software programs and the hardware server, rather than among persons and corporations.

Moreover, as admitted by the Examiner (p. 4, last paragraph of the outstanding office action), Wollrath does not provides any estimation. As such, Wollrath does not provide any “estimation option as a contact condition for changing any contact conditions of the contract based upon the estimation.” Also, as admitted by the Examiner (p. 7, last paragraph of the outstanding office action), Wollrath does not bill or pay charges. As such, Wollrath does not provide any “billing method” or “billing period.” Accordingly, Wollrath does not teach contract conditions including the estimation option, the billing method, or the billing period. As mentioned, Wollrath does not involve any human users such that Wollrath does not “show,” i.e., make visible, any human users the above-mentioned contract conditions. In Wollrath, a renewed lease was proposed by a server as long as a client requested (col. 13, lines 26-30), rather than subject to a condition “only if the estimation option is available in the original contact” according to the invention

Mummert fails to compensate for Wollrath’s deficiencies since Mummert merely predicts future utilization of the physical **storage container (computer hardware**, i.e., storage resources in a computer system; Abstract), rather than future storage usage of a **human user**.

Mummert was relied upon by the Examiner to teach reporting estimation based upon history usage. However, Mummert does not provide any “estimation option as a contact condition for changing any contact conditions of the contract based upon the estimation.” Also, as admitted by the Examiner (p. 7, last paragraph of the outstanding office action), Mummert does not bill or pay charges. As such, Mummert does not provide any “billing method” or “billing period.” Accordingly, Mummert does not teach contract conditions including the estimation option, the billing method, or the billing period. As mention, Mummert does not involve any human users such that Mummert does not “show,” i.e., make visible, any human users the above-mentioned contract conditions.

Shear was relied upon by the Examiner to teach bill and pay charges. However, Shear does not provide any “estimation option as a contact condition for changing any contact conditions of the contract based upon the estimation.” Accordingly, Shear does not show human users the above-mentioned contract conditions including the estimation option.

Kenley was relied upon by the Examiner to teach data migration. However, Kenley does not provide any “estimation option as a contact condition for changing any contact conditions of the contract based upon the estimation.” Accordingly, Kenley does not show human users the above-mentioned contract conditions including the estimation option.

Applicants contend that neither Wollrath, Mummert, Shear, Kenley nor their combination teaches or discloses each and every feature of the present invention as disclosed in independent claims 1-3. As such, the present invention as now claimed is distinguishable and thereby allowable over the rejections raised in the Office Action. The withdrawal of the outstanding prior art rejections is in order, and is respectfully solicited.

Conclusion

In view of all the above, clear and distinct differences as discussed exist between the present invention as now claimed in independent claims 1-3 and the prior art references upon which the rejections in the Office Action rely, Applicant respectfully contends that the prior art references cannot anticipate the present invention or render the present invention obvious. Rather, the present invention as a whole is distinguishable, and thereby allowable over the prior art.

Favorable reconsideration of this application is respectfully solicited. Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to contact the Applicant's undersigned representative at the address and phone number indicated below.

Respectfully submitted,

Stanley P. Fisher
Registration Number 24,344



Juan Carlos A. Marquez
Registration Number 34,072

REED SMITH LLP
3110 Fairview Park Drive, Suite 1400
Falls Church, Virginia 22042
(703) 641-4200

March 14, 2005

SPF/JCM/JT